

Unit 3

MULTIMEDIA SYSTEMS

In this unit you will

- ▶ learn and practice vocabulary related to home entertainment, home cinema and surround sound system
- ▶ understand and follow instructions for setting up a surround sound system



Part 1 Home Entertainment 1a Class Discussion

- ▶ What kind of home entertainment do you have at home?
- ▶ What digital home entertainment systems would you like to have? Why?
- ▶ Why do you think home entertainment systems have become so popular?



1b Match

Match the following devices with the pictures for Home Entertainment:

3D TV Home Cinema Speaker Package DVD player
Home Cinema Projector Floor Speakers Smart TV



1c Find the meaning

Read through the following text and find the meanings of the **highlighted** words using your glossary.

HOME ENTERTAINMENT

Home entertainment is how we have fun and relax at home. Today it is **dominated by** technology, especially television. Watching videos, playing computer games, and listening to music are all home entertainment. So are reading books, playing cards, and storytelling.

WHAT DID PEOPLE DO BEFORE TV WAS INVENTED?

People had to make their own **amusement** by playing games, singing, or reading stories. The **invention** of the radio and the gramophone at the beginning of the 20th century meant that people could listen to music and programs at home. Just as we sit in front of the TV to watch our favorite shows, people in the past sat around the radio or listened to the gramophone.

WHAT IS HOME CINEMA?

Home cinema is an **attempt** to bring the look, the sound, and the **excitement** of movies to the home. A basic kit includes a **wide-screen** television, a DVD (digital video disc) player, and speakers **positioned** around the room to give surround sound. For a more **cinematic effect**, a **wall-mounted** digital projector and a **projection screen** can be used instead of a TV.

IS DIGITAL BROADCASTING HERE TO STAY?

Digital broadcasting has many advantages over the old analog system. Information is compressed (made smaller), producing more channels and better-quality pictures and sound. Digital technology makes TV and radio more **interactive** for the **audience**.

WHAT IS "HI-FI" MUSIC?

"Hi-fi" is short for "**high-fidelity**", and it refers to recorded music that is an **accurate copy** of the original music. High-fidelity recordings were first made using **vinyl records**, then magnetic tape (cassettes). They are now **captured** on digital media such as CDs, MiniDiscs, and MP3 files.

Copied from <<http://www.factmonster.com/dk/encyclopedia/home-entertainment.html>>

Check your understanding

Do the following activities according to the information in the text.

1d True or False

1. Entertainment is not possible without technology.
2. Before technology people had to create their own entertainment.
3. Gramophone and radio were invented around the same time.
4. You cannot have a home cinema without a TV.
5. With the analog system we had less channels.

1e Answer the questions

1. What dominates today's home entertainment?
2. How did people entertain themselves before the invention of TV? and before that?
3. What can you replace a TV with in a home cinema system?
4. How does digital broadcasting compare with the analog system?
5. What kind of digital media is used for hi-fi?

Part 2 How to choose your TV

2a Class Discussion

- ▶ What different kinds of TV sets do you know?
- ▶ What kind of TV do you have?
- ▶ Would you like to change your TV? What would you buy?



2b Check the meaning

Use your glossary to check the meanings of the **highlighted** words in the following text.

LED-LCD vs. Plasma

Which type of flat-screen (panel) HD TV should you buy?

If you look around the Internet you'll find a ton of information (and some **misinformation**) about today's flat-screen TVs. The chart below provides a quick comparison of plasma and LED LCD.

Display Type	Screen Size	Viewing Angle	Picture Contrast	Video Motion	Colours	Power Consumption
Plasma	42"-65"	Excellent	Very Good to Excellent	Excellent	Excellent	Good
LED-LCD	19"-84"	Good to Very Good	Very Good to Excellent	Good to Excellent	Excellent	Excellent

Plasma

Pros: excellent contrast and black levels; **effortless motion**; **uniform illumination** over the **entire screen area**, good **picture depth**; often priced lower than LED-LCD models with similar screen size and features **Cons:** limited screen sizes: 42"-65"; some models not as bright as most LED-LCD TVs; not as **energy-efficient** as LED-LCDs and typically **generate** more heat; a plasma panel is usually a bit heavier and thicker than an LED-LCD panel

LED-LCD

Pros: models with **advanced local dimming backlights** can have black levels rivaling plasma; LED-LCD panels are thin and **lightweight** – especially models with **edge-lit** backlights; this is the most energy-efficient display technology **Cons:** picture may look a bit flat and less "filmlike" than plasmas; when viewed **off-axis** the picture may lose some contrast and color

Adapted from article by Steve Kindig <http://www.crutchfield.com/S-V1xycf2IRMp/learn/learningcenter/home/tv_flatpanel.html?showAll=N>

2c Check your understanding

Work with a partner to answer the following questions and be ready to share your answers with the class.

1. If you wanted to buy the biggest screen which type of TV would you buy?
2. If you watch a lot of sports and action films which TV is better for you?
3. Which TV is more energy efficient?
4. Which TV is usually cheaper?
5. If you want a lightweight and thin panel which TV would you buy?
6. What happens if you view a Plasma TV off-angle? How about LED-LCD?
7. What is the advantage of edge-lit backlights in a TV?

Part 3 Home Cinema System

3a Class Discussion

- ▶ Who has a home cinema system?
- ▶ What do you need for a home cinema system?
- ▶ What are your favorite brands?



3b Match

Read through the text and match the **highlighted words** with their Turkish equivalents below.

ses kalitesi eslestirme tasarlanmis eleman/parça getirmek özelleştirilmiş
çekici ayrı parçalar kurmak deneyim önceden paketlenmiş

What Do You Need for a Home Cinema?

Putting together a great home theater system can be simple. The key is **pairing** a good high-definition (HD) picture with **engaging** surround sound. We've outlined the **components** you'll need on the next page. Some of these you probably already have.

Why build your own system?

The simple answer is **sound quality**. When it comes to surround sound, you've got two options: a) building your own system out of **separate components** or b) choosing a **pre-packaged** one. Pre-packaged systems are **designed** to be easy to choose and **set up**, and can definitely **deliver** an engaging surround sound **experience**. But with a component system, you'll enjoy higher-quality audio performance.

Component systems are good for people who:

- ▶ want a full surround sound experience and high-quality audio
- ▶ already have a few key components, like a Blu-ray® player, receiver, or a set of speakers
- ▶ prefer to create a **customized** home cinema system
- ▶ are comfortable choosing and setting up separate components

Adapted from article by Julie Govan <http://www.crutchfield.com/SSndpz1edgm/learn/learningcenter/home/ht_need.html>

3c True or False

Decide whether the following statements are True (T) or False (F) according to the text.

1. You need a high definition picture and good surround sound system for a great home cinema.
2. You must buy a pre-packaged sound system to set-up a home cinema.
3. It is more difficult to set-up a pre-packaged sound system.
4. You can increase the quality of audio performance by building your own system.

3d Discuss and decide

Discuss with your partner and decide which system is better in the following cases:

- A** - pre-packaged system
B - component system

1. You are crazy about sound quality.
2. You own some components.
3. You are not very technical.
4. You are very technical.
5. You want a system that reflects (yansıtır) your personality.
6. You don't have much time.

3e Find the meaning

Use your glossary to check the meanings of the **highlighted words** in the text on the next page.

3f Ask and answer

Work in groups and write questions about the components like below. Make sure you know the answers. Then ask your questions to the other groups, and answer theirs.

What kind of X (component name) do you need?

Why do you need a/an X?

What should you be careful about when you choose a/an X?

Components you'll need for a complete home cinema system



A TV

A **gorgeous** picture is the **focal point** of many home cinema systems. Almost all of today's TVs are HD (high definition)— they offer a stunning, **high-resolution** 720p or 1080p picture. Now some of them also offer the 3D experience in the comfort of your own home (a **compatible** 3D Blu-ray player and glasses are required).



A home theater receiver

A receiver acts as the control center for audio; it **processes** audio signals, **amplifies** them, and sends them to your speakers. You can also use your home cinema receiver to manage video as well as audio. You can run all your video signals to their receiver, and make a single video connection from their receiver to the TV and **simplify** everyday use. It's a great **option** if you want to connect **multiple sources**, like a **satellite receiver**, a Blu-ray player, and a video game console to your home cinema system. Then whenever you want to watch a movie or play a video game, you just have to press a button on your receiver's remote to switch to the right inputs, without having to switch **inputs** on your TV.



Speakers and a subwoofer

To create exciting movie sound, you need at least five **voice-matched** speakers and a subwoofer. Some people **opt for** six or seven speakers and a subwoofer, so they can hear even more channels of surround sound. If you buy a pre-matched speaker system, you won't have to worry about voice-matching. But if you put together your own system, then make sure you buy from the same family of speakers.



Cables

You'll need speaker cables, audio cables, and video cables. You may already have some cables you can use. Just don't forget that very old or very cheap speaker cable can **degrade** your sound quality, the same way very old or very cheap speakers just don't sound good. Also, "**freebie**" audio and video cables that come in the box with a component can also result in lower-quality sound or picture.



Universal remotes

Have you ever mixed your remotes, and ended up changing your TV's input when you mean to pause the movie on your Blu-ray player? A universal remote can really help you **simplify** your system — and clean up your coffee table.



Power protection

It makes sense to use a power protection unit to **safeguard** your equipment from **lightning strikes** and **power surges**.



Video sources: Blu-ray movies, high-definition (HD) broadcasts, and more. If you've got a HDTV, you'll want plenty of HD sources. A Blu-ray player will give you the sharpest picture possible. High-definition Blu-ray Discs™ are your main **source** for full 1080p video.



Speaker stands, and speaker brackets

Depending on your room's size and shape, and the equipment you choose, you may need some stands to place your **gear** on. You should think about whether you'll need anything like this **ahead of time**, so you can avoid putting your TV on old **crates**, or having small surround speakers on the floor behind your **sofa** where you can't really hear them.

3g Who has what?

Imagine you were to set-up a home cinema system in your class by borrowing components from your home. Ask around the class to find out who has what components and see if you can set up a basic system.

Part 4 Setting-up your surround sound system database?

4a Class Discussion

- ▶ Who knows how to set up a surround sound system?
- ▶ Where do you place the different components?



4b Check the meaning

Read through the text and use your glossary to check the meanings of the *highlighted words*.

How to place your surround system speakers for a great sound

Of course, everyone's room is different, because of **variations** in size, shape, and the type of receiver and speakers in them. Each speaker in a home theater system has a different role. **The front left and right speakers** handle the **majority** of the soundtrack and effects for movies and TV shows. They should be **positioned** to the right and left of your TV with an **angle** towards the sitting area. **Height-wise**, these speakers should be positioned so the **tweeters** are level with your ears when you're sitting down.

The center channel speaker delivers almost all the dialogue, and this speaker should also be set up so the tweeters are at about ear height when you're sitting down. And that can be a bit **tricky** because this speaker should also be placed above or below your TV. But that ear level height is really important. Tweeters produce high frequency sounds, like the **creaking** of a door and the high notes of a **violin**, and they're very **directional**. If they aren't **aimed at** your ears, you could miss parts of the soundtrack.

Now, your surround speakers handle what are called "**ambient effects**". These are sounds that deliver the impression of really being there, such as the gentle **patter** of rain drops and the **ricochet** of a **bullet**. Usually you need just two surround speakers, but you can have as many as four if your room is big. These speakers should be higher than your front speakers. You should place these on both sides of your sitting area, **slightly angled** towards the listeners. Keep in mind that you shouldn't aim these speakers right at your ears since they provide a wide range of **background** effects. If you have four surround speakers and a big room, you can place two of these behind the sitting area.

Finally, your subwoofer is **responsible for** producing low frequencies, like notes from a bass guitar or the **rumble** of an **explosion**. You generally have a bit more **flexibility** in placing your subwoofer because the low frequencies it produces aren't directional. They **spread evenly** throughout your room. There are just a few basic things to keep in mind. First, placing your sub in a corner will give you bigger, louder bass. If you place it along the wall away from a corner will give you tighter, more precise bass. It's really all **down to personal preference**.

adapted from video <<http://www.crutchfield.com/learn/video/speakerplacement.html>>

4c Complete the table

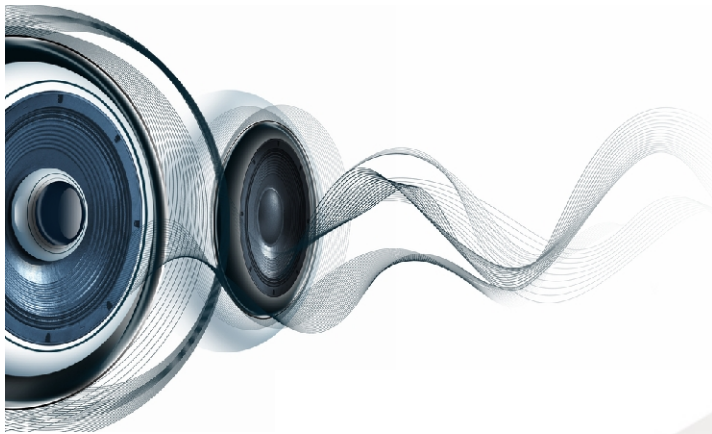
Work with your partner, read the text again and fill in the following table according to the text.

Component name	Function	Where to place
Front Speakers		
Centre Channel Speaker		
Surround Speakers		
Subwoofer		

4d Label

Label the different components in the picture

- front speakers centre speaker
- surround speakers subwoofer



4e Design



Now place the speakers around the following room according to the instructions in the text. You can slightly move the furniture around if necessary.



4f Discuss

In pairs or small groups discuss what you would do in the following situations:

1. You have 2 more surround speakers and the room is bigger.
2. You want to have loud bass sound.
3. Instead of a window you have a door to the corridor.

Part 5 Revision

5a Fill in the gaps with the following words

speaker package digital broadcasting high resolution home entertainment HDTV
 high quality audio screen plasma universal remote separate components
 tweeters power protection lightweight 3D TV energy efficient projector

1. Storytelling was a common before the invention of TV and radio.
2. You need special glasses to enjoy a
3. You can set-up a home cinema system by using a or
4. In a home cinema system you can use a and a instead of a TV.
5. We have more channels and better picture quality with
6. LED-LCD TVs are more than TVs.
7. LED-LCD are thin and
8. You can build with a component system.
9. You can control all your equipment with a
10. offers picture.
11. Front and centre should be at ear level.
12. You need a unit to safeguard your expensive home cinema equipment.



5b Label

Label the different components for the home cinema in the picture.



5c Name

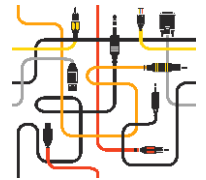
Name the following items:



A



B



C



D



E



F

5d Translate

Translate the following phrases to English.

1. evde müthiş sinema deneyimi
2. geniş ekran televizyon
3. yüksek çözünürlüklü görüntü
4. ihtiyaca özel ev sinema sistemi
5. duvara monte dijital projeksiyon aleti
6. kişisel ihtiyaca bağlı
7. tüm ekran alanı
8. yandan aydınlatmalı arka ışık
9. enerji tasarruflu görüntü teknolojisi